UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,996	10/31/2003	Hong Rae Cha	HI-0184	8240

34610 7590 12/15/2006

FLESHNER & KIM, LLP
P.O. BOX 221200
CHANTILLY, VA 20153

EXAMINER	
SANEI, HANA ASMAT	
ART UNIT	**PAPER NUMBER**
2879	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,996	CHA, HONG RAE	
	Examiner	Art Unit	
	Hana A. Sanei	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-24,28 and 43* is/are allowed.

6)☒ Claim(s) *5-13,25-27,29-42 and 44-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/27/06 has been entered.

Cancellation of claims 1-4 has been entered.

Claims 5-49 are pending in the instant application.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

Claim 1 is objected to because of the following informalities: The phrase "extending portion" is not defining a particular portion of the film type front surface filter. Examiner suggests modifying to include – wherein the extending portion does not overlap with the panel –. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-13, 25-27, 34-37, 39, 48-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Gotoh et al (US 6229085 B1).

Regarding Claim 10, Gotoha teaches a panel having at least an upper substrate and a lower substrate for displaying an image (1, plasma display panel, hereinafter referred to as PDP, see at least Fig. 7); a film type front surface filter (2c, filter) formed directly on (22, antistatic layer directly disposed on 1) a front surface of the panel (see Fig. 7); a back cover (4, rear portion of enclosure) spaced from and disposed in a backward portion of the panel to cover the backward portion of the panel; a front cover (3, frontal portion of an enclosure) disposed spaced from and disposed in a forward portion of the film type front surface filter to cover at least part of the film type front surface filter; a filter support (7, mounting bracket) disposed between the film type front surface filter and the front cover to physically support the film type front surface filter and electrically connect ("conductive mesh 12 is connected to ground through the mounting bracket 7, conductive coat 20, metallic portion 1e, and though the grounded terminal 10, thereby ensuring a common return path in electrical circuits is present in the mounting bracket, Col. 5, lines 5-8) the film type front surface filter with the front cover or back cover; and a first conductive layer (12) formed between the end portion of the film type front surface filter and the filter support to electrically connect the film type front surface filter and the filter support.

With respect to Claim 11, Gotoh teaches that the first conductive layer (12) comprising a metallic mesh layer (conductive mesh, Col. 5, lines 15-19).

With respect to Claim 12, Gotoh teaches that the first conductive layer comprises an EMI shielding layer (to prevent the electromagnetic wave leakage of the PDP; Col. 5, lines 15-19).

With respect to Claim 13, Gotoh teaches a second conductive layer (20) that is further disposed between the first conductive layer and the filter support. It should be noted that the second conductive layer is inherently between Gotoh's first conductive layer and filter support in a lateral and indirect configuration.

With respect to Claim 25, Gotoh teaches that the film type front surface filter is of an AR layer (21).

With respect to Claim 27, Gotoh teaches that the film type front surface filter does not include glass (2c, Col.4, lines 13-19; Col. 4, lines 30-32, Col. 5, lines 60-67).

With respect to Claim 34, Gotoh teaches a panel (1, plasma display panel, hereinafter referred to as PDP, see at least Fig. 7); a front surface filter (2c, filter) formed directly on (22, antistatic layer directly disposed on 1) the front surface of the panel; a first metallic layer (20, conductive coat disposed on 1) formed on a prescribed areas of a front surface of the front surface filter, a back cover (4, rear portion of enclosure) disposed at a rear surface of the panel; a front cover (3, frontal portion of an enclosure) disposed at a front surface of the front surface filter; a filter support (7, mounting brackets) formed on a front surface of the first metallic layer for electrically connecting ("conductive mesh 12 is connected to ground through the mounting bracket 7, conductive coat 20, metallic portion 1e, and though the grounded terminal 10, thereby

ensuring a common return path in electrical circuits is present in the mounting bracket, Col. 5, lines 5-8) the film type front surface filter with the back cover.

With respect to Claim 35, Gotoh teaches that the first metallic layer is further formed on a lateral face of the front surface filter (lateral portions of the 20 interior-conductive-coated surface of 3 & 4).

With respect to Claim 36, Gotoh teaches that a second metal layer (12) is further disposed between the first metal layer (20) and the filter support (7).

With respect to Claim 37, Gotoh teaches that the front surface filter is a film type front surface filter (see Fig. 7 at least).

With respect to Claim 48, Gotoh teaches that the film type front surface filter does not include glass (2c, Col.4, lines 13-19; Col. 4, lines 30-32, Col. 5, lines 60-67).

With respect to Claim 39, Gotoh teaches a panel (1, plasma display panel, hereinafter referred to as PDP, see at least Fig. 7); a front surface filter (2c, filter) formed directly on (22, antistatic layer directly disposed on 1) the front surface of the panel; a first metallic layer (20, conductive coat) formed on a prescribed areas of a front surface of the front surface filter, a rear surface and a lateral face of the front surface filter (top, bottom, and lateral portions of the 20 interior-conductive-coated surface of 3 & 4); a back cover (4, rear portion of enclosure) disposed at a rear surface of the panel; a front cover (3, frontal portion of an enclosure) disposed at a front surface of the front surface filter; a filter support (7, mounting brackets) formed on a front surface of the first metallic layer for electrically connecting ("conductive mesh 12 is connected to ground through the mounting bracket 7, conductive coat 20, metallic portion 1e, and though the

grounded terminal 10, thereby ensuring a common return path in electrical circuits is present in the mounting bracket, Col. 5, lines 5-8) the film type front surface filter with the back cover.

With respect to Claim 49, Gotoh teaches that the film type front surface filter does not include a glass layer (2c, Col.4, lines 13-19; Col. 4, lines 30-32, Col. 5, lines 60-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 5-9, 29-33, 38-42, 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al (US 6229085 B1) in view of Koike et al (US 6965191 B2).

Regarding Claim 5, Gotoh teaches a panel (1, plasma display panel, hereinafter referred to as PDP, see at least Fig. 7); a film type front surface filter (2c, filter) disposed directly on (22, antistatic layer directly disposed on 1) a front surface of the panel; a back cover (4, rear portion of enclosure) disposed at a rear surface of the panel; a filter support (7, mounting brackets) for electrically connecting ("conductive mesh 12 is connected to ground through the mounting bracket 7, conductive coat 20, metallic portion 1e, and though the grounded terminal 10, thereby ensuring a common return path in electrical circuits is present in the mounting bracket, Col. 5, lines 5-8) the film

type front surface filter with the back cover; a support member (3, frontal portion of an enclosure) disposed to encompass a portion of the film type front surface filter and the filter support, and connected to the back cover (see where 3 & 4 meet); and a metallic layer (20, conductive coat) formed on an extending portion of the film type front surface filter (2c, including 22). Gotoh fails to teach a film type front surface filter having a wider area than the panel.

In the same field of endeavor, Koike teaches a display panel having a film type front surface filter (functional transparent layer, Col. 7, lines 7-9; Col. 9, lines 7-16; Figure 6, #60) that has a wider area than the panel in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen (Col. 1, lines 9-15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the area of the film type front surface filter, as disclosed by Koike, in the PDP of Gotoh in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen.

With respect to Claim 6, Gotoh teaches that the metallic layer (20) is formed between the filter support (7) and the support member (3).

With respect to Claim 7, Gotoh teaches that the metallic layer (20) is electrically connected (Col. 4, lines 2-11) with the film type front surface filter (2c) and the filter support (7).

With respect to Claim 9, Gotoh teaches that the metallic layer (20), the filter support (7) and the support member (3) respectively have at least one hole (between bosses, 5) and a screw (6) disposed to pass through the hole such that the metallic layer, the filter support and the support member are fixed to one another (refer at least Figure 7).

With respect to Claim 42, Gotoh teaches that the filter (2c) contacts the panel (1) such that the filter is provided on the panel (Fig. 6).

With respect to Claim 45, Gotoh-Koike teaches that the extending portion does not overlap with the panel (see at least Fig. 6, 7 of '191).

With respect to Claim 46, Gotoh teaches that the film type front surface filter does not include a glass layer (2c, Col.4, lines 13-19; Col. 4, lines 30-32, Col. 5, lines 60-67).

Regarding Claim 29, Gotoh teaches a panel (1, plasma display panel, hereinafter referred to as PDP, see at least Fig. 7); a film type front surface filter (2c, filter) disposed directly on (22, antistatic layer directly disposed on 1) a front surface of the panel; a back cover (4, rear portion of enclosure) disposed at a rear surface of the panel; a filter support (7, mounting brackets) for electrically connecting ("conductive mesh 12 is connected to ground through the mounting bracket 7, conductive coat 20, metallic portion 1e, and though the grounded terminal 10, thereby ensuring a common return path in electrical circuits is present in the mounting bracket, Col. 5, lines 5-8) the film type front surface filter with the back cover; a support member (3, frontal portion of an enclosure) disposed to encompass a portion of the film type front surface filter and the

filter support, and connected to the back cover (see where 3 & 4 meet); and a metallic layer (20, conductive coat) which does not overlap with the panel (non overlapping region is lateral portions of the 22 interior-conductive-coated surface of 3 & 4), formed on the film type front surface filter (2c, including 22). Gotoh fails to teach a film type front surface filter having a wider area than the panel.

In the same field of endeavor, Koike teaches a display panel having a film type front surface filter (functional transparent layer, Col. 7, lines 7-9; Col. 9, lines 7-16; Figure 6, #60) that has a wider area than the panel in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen (Col. 1, lines 9-15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the area of the film type front surface filter, as disclosed by Koike, in the PDP of Gotoh in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen.

With respect to Claim 30, Gotoh teaches that the metallic layer (20) is formed between the filter support (7) and the support member (7).

With respect to Claim 31, Gotoh teaches that the metallic layer is electrically connected (Col. 4, lines 2-11) with the film type front surface filter (2c) and the filter support (7).

With respect to Claim 33, Gotoh teaches that the metallic layer (20), the filter support (7) and the support member (3) respectively have at least one hole (between

bosses, 5) and a screw (6) disposed to pass through the hole such that the metallic layer, the filter support and the support member are fixed to one another (refer at least Figure 7).

With respect to Claim 44, Gotoh teaches that the filter (2c) contacts the panel (1) such that the filter is provided on the panel (Fig. 6).

With respect to Claim 47, Gotoh teaches that the film type front surface filter does not include a glass layer (2c, Col.4, lines 13-19; Col. 4, lines 30-32, Col. 5, lines 60-67).

Regarding Claim 38, Gotoh teaches the invention set forth above (see rejection in Claim 34 above). Gotoh fails to teach that the prescribed area of the film type front surface filter corresponds to an area not overlapping with the panel.

In the same field of endeavor, Koike teaches a display panel having prescribed area of the film type front surface filter corresponds to an area that is not overlapping with the panel (functional transparent layer, Col. 7, lines 7-9; Col. 9, lines 7-16; Figure 6, #60) in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen (Col. 1, lines 9-15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the area of the film type front surface filter, as disclosed by Koike, in the PDP of Gotoh in order to ensure capability of shielding other electromagnetic waves than a visible light from among electromagnetic waves generated from display screen.

With respect to Claim 41, the claim is rejected over the same reasons as stated in the rejection of Claim 38. Motivation to combine would be the same as stated above.

With respect to Claim 42, Gotoh teaches that the filter (2c) contacts the panel (1) such that the filter is provided on the panel (refer now to Fig. 7).

2. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al (US 6229085 B1) in view of Yoshikawa et al (US 6255778 B1).

With respect to Claim 13, Gotoh teaches the invention set forth above (see rejection in Claim 10 above). Gotoh lacks the second conductive layer comprising at least one of a fringe spring gasket or a shielding foam gasket.

In the same field of endeavor, Yoshikawa teaches a second conductive layer that is further comprised of a shielding foam gasket (refer to '536; #17, Figure 8; 3 constitutes the second conductive layer; see at least Figure 3) in order to ensure good conduction between the conductive member mesh and the body of equipment (Col. 11, lines 50-55).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to add the second conductive layer, as disclosed by Yoshikawa, in the PDP of Gotoh in order to ensure good conduction between the conductive member mesh and the body of equipment.

Allowable Subject Matter

Claim 14-24, 28, 43 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a plasma display panel, comprising: panel having an upper substrate and a lower substrate; a film type front surface filter disposed at a front surface of the panel, the film type front surface filter having a wider area than that of the panel so that the film type front surface filter has an extended portion in at least part thereof beyond the edges of the panel; a back cover spaced from and disposed in a backward portion of the panel to cover the backward portion of the panel; a filter support disposed between the film type front surface filter and the back cover to physically support the film type front surface filter and electrically connect the film type front surface filter with the back cover.

However, the prior art of record neither shows nor suggests a motivation for and a first conductive layer formed between the extended portion of the film type front surface filter and the filter support to electrically connect the film type front surface filter and the filter support as set forth in Claim 14.

Claim 15-24, 28, 43 are allowable because of their dependency status from claim 14.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana A. Sanei whose telephone number is (571) 272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Hana A. Sanei

Mariceli Santiago
Primary Examiner